



Bexar Wire

San Antonio Radio Club
W5SC



2023, No. 05

May 2024

May Happenings:

- 5/8, AARO Meeting 7 PM
- 5/9 SARC, Blanco Barbeque, 7 PM
- 5/11 McARC Meeting 9 AM
- 5/24 ROOST Meeting 7 PM
- 5/25 SARC Fox Hunt

Scholarship Fund Report

Jon April KI5CSK

Each year the San Antonio Radio Club (SARC) gives two \$1,000 scholarships to young hams headed to college. The program is administered by the American Radio Relay League (ARRL). The fund is paid for with the annual scholarship raffle. So far, raffle ticket sales are behind target. Here are some details:

Scholarship Prizes	1st	FTDX10
	2nd	FT-991A
	3rd	FT-710 AESS
	4th	FT-5DR
	5th	FT-5DR

Scholarship Ticket Sales: Actual vs. Goal 5-May-2024

Break even is approx 290 tickets sold



The next meeting, May 9, 2024, will be at 7 PM at Blanco BBQ, 13259 Blanco Rd, San Antonio, TX 78216, (210) 251-2602 . Program: EMI/RFI Filters, Jon April, KI5CSK

HF Radio Blown Out by Solar Storm

If you tried to work HF radio on Tuesday, you found the bands were unnaturally silent. Here's why:



An X4.5 solar flare on May 6, 2024. (Image credit: NASA / SDO and the AIA, EVE, and HMI science teams / helioviewer.org)© Provided by Space

From MS Space
By Meredith Garofalo

[Sun unleashes X-class solar flare, radio blackouts reported \(video\) \(msn.com\)](https://www.msn.com/en-us/news/science/sun-unleashes-x-class-solar-flare-radio-blackouts-reported-video)

Arecently detected sunspot region continues its active pattern with yet another powerful solar flare reported early Monday morning.

The X4.5 [solar flare](#) peaked at 2:35 a.m. EST (0635 GMT) on May 6. Following the flare, parts of some of Earth's sunlit side had temporary or complete loss of high frequency (HF) radio signals including across Asia, eastern Europe, and eastern Africa. This comes after a series of previous eruptions from the active sunspot that began at the beginning of the month and brought [shortwave radio blackouts](#) across Australia, Japan and much of China. **(Continued on Page 6)**

PRESIDENT’S RADIOGRAM

NUMBER	PRECEDENCE	HX	STATION OF ORIGIN	CHECK	PLACE OF ORIGIN	TIME FILED	DATE
05	R		N5IUT		San Antonio, TX		May2024
TO							

Hello South Texas,

San Antonio Radio Club will be very active in May and June!

We have a Foxhunt scheduled for Saturday, May 25, 2024.

BSides, a San Antonio computer security conference will be at St. Mary's University, Saturday, June 8, 2024. <https://www.bsidesatx.com/> The prices have gone up, but volunteers are still free to attend! See the site to sign up as a volunteer.

June 22 - 23 Field Day 2024. We can always use more radio operators so come on out.

Last year's Field Day turnout was fantastic, and this year is looking great! What was impressive last year was the number of operators that worked the overnight hours. When I pulled up at Field Day 2023 at 5:45 AM Sunday morning with tacos and coffee, it looked like the parking lot was full! Also, last year we saw an amazing example of a solar powered battery running a rig for the entire length of the event.

We are always open to everyone getting on the radios. This year we will have a dedicated Safety Team. Come on out and pull up an antenna, take care of a generator, or as I said before, work the radios.

We will also need help loading and unloading the trailer.

BYOR and BYOA. If you would like to bring your own radio or bring your own antenna, please let us know and we will make a spot for your gear!

This reminds me that this is a great time to upgrade to a General Class license. There will be a test session Saturday June 22 at the Field Day site.

See you at the club meeting on May 9th.

73 Paul, N5IUT, President

Bexar Wire

Published monthly by:



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The due date for articles is the **Monday** before the first **Thursday** of the month

Meeting Minutes
7:00 p. m., April 11, 2024
Blanco BBQ, 13259 Blanco Rd., San Antonio, TX 78216

Meeting called to order at 7:02 PM//Pledge of Allegiance//Introductions

Presentation: Topic: POTA Presenter: Keith Hicks - KD5JGD campindude73@gmail.com
210.391.1951

Approval of Minutes of the Last Meeting

There being no additions, corrections, or deletions, minutes were approved without objection by unanimous consent.

Officer Reports:

President – Paul Guido, N5IUT – No report – not present

Vice President – Robert Richter, W5ENG – No report – not present

Secretary – Jack Bannin – The minutes from club meetings can be found at the w5sc.org website, in the Newsletters section.

Treasurer – Jon April, K15CSK – Provided update on club's financial status.

Chairman of the Board Report – Harold Fleischer, AE5AS – No report – not present.

Education and Training – Vacant – No report. If interested, contact the club President.

Emergency Communications – David Rice – No report.

Bill Craft, KD2HIQ Webmaster /Membership – Activities for March

1. Web Site-
 - a. Posted newsletters
 - b. Updated RF flyer
 - c. Updated RF info page
 - d. Added Solar Eclipse info
 - e. Added link for remote testing from Anchorage Ham Club
2. Groups.io
 - a. Updated membership list
 - b. Updated calendar
 - c. Added Solar eclipse info
3. Mail chimp- Meeting notice -
4. Twitter

MEMBERSHIP

Membership	As of 4/9/2024		
Paid 128	New Members for 2024		
Mil 6	First	Last	Call
Family Members 16	Drew	Garthe	K5APG
RF-Free 8	Richard	Anderson	
Fee-VE 13			
ARRL Members: 95			
Total Membership: 170			

POTA – POTA event on April 20th TBD.

Newsletter Editor – Jimmie Neff – Newsletter distributed and posted to website on April 10, 2024. Invited members to contribute information, photos, and stories for the newsletter. Deadline is Monday prior to the meeting.

Field Day – Jon April: 4th full weekend in June each year: June 22-23, 2024. Jon will be reaching out to members for assistance in planning and executing Field Day. Starts on that Saturday at 1 PM local time.

Finance and Review – No Report.

JOTA – No report. Jamboree-on-the-Air is held the third weekend in October. There are no official hours, so you have the whole weekend to make JOTA contacts. The event officially starts Friday evening during the JOTA Jump Start and runs through Sunday evening. Source: <https://www.scouting.org/international/jota-joti/jota/>. To volunteer, you will need to undergo a background check and take a self-paced course on protecting Scouts.

Centennial Committee – Tom O’Brien AB5XZ – No report. Souvenirs (patches, challenge coins, pins) from the club’s 2019 centennial year are still available.

Radio Fiesta – Aubrey Mason – No report.

VE Team – Benny Martinez, NU5P – Not present. Next testing session: April 27, 2024. Additionally, we will be providing exams for a group of 25. Volunteer examiners are needed on May 2nd. More information to follow.

Silent Key Committee – Rodney Brown, AA5RB. Nothing new to report since March meeting. Summarized the purpose of the SK Committee.

Monthly Activities – None

Executive – No report.

Election Committee – Paul Guido, N5IUT – No report – not present.

Scholarship Committee – Robert Rodriguez Scholarship Fund is selling raffle tickets to raise money to offer two \$1000.00 scholarships. Drawing will be 11/14/24 at general membership meeting. No need to be present to win. Tickets are \$25 each. Maximum number to be sold: 400. Jon April is selling the tickets.

Old Business (Motions carried over from previous meetings) – None.

New Business – None.

Announcements – None.

Meeting Adjourned @ 8:21 PM

The 2024 Robert A. Rodriguez Scholarship Fundraiser is here! 5 chances to win hot selling Yaesu Radios. Only 400 tickets sold @ \$25 each. Drawing is November 14, 2024 at the club meeting.

To purchase a ticket: Mail check to: San Antonio Radio Club PO Box: 34263 San Antonio, TX 78265-4263 Ticket will be mailed to you or PayPal treasurer@w5sc.org be sure to include your name, phone # & call sign. 210-642-9391 or Treasurer @w5sc.org. For more info see the club web page at: w5sc.org



Volunteer Examiners at Work



April VE Test--Benny Martinez, NU5P,



We had 10 Test.

- 1 person failed the tech
- 2 people took the Extra and passed
- 7 people took tech and passed
- 1 person took the general and passed but tried and failed the extra.

Jon April, KI5CSK presents the Cray Lester (K5MUG, SK) radio to Emily Burnett

Only 4 people filled out the new member form.

HF Radio Blown Out by Solar Storm (Continued from Page 1)

According to NOAA's [Space Weather Prediction Center](#) (SWPC), the most recent eruption happened early this morning (May 2) and at the most powerful category flare, X-class.

Related: Solar cycle: What is it and why does it matter?

Solar flares categorized by their strength, starting at the B-class which are the weakest and up to the strongest, the X-class. There are four classes and each one increases in energy by ten times; so the strength of an X would be 1000 times more powerful than a B.

In addition, each flare gets an associated number which pertains to its relative strength. The most recent flare was an X4.5 which also corresponds with an "R" scale for [radio blackouts](#) that ranges from one to five. The higher up on the scale you go, the larger the effects we have on Earth. For an

R3 like early this morning, it's categorized as "strong" and we typically average about 175 per cycle (with one cycle lasting for 11 years).

According to a [statement](#) from the SWPC, both regions 3663 and 3664 have the potential to stay busy through May 8. Moderate to high levels of solar activity are expected with an increased likelihood for more flares in the top two classes, M and X.

Scientists will also continue to monitor if there was a [coronal mass ejection](#) (CME) from the eruption, a large expulsion of plasma and magnetic field from the sun, which could bring additional impacts to Earth in the coming days including issues with power grids, telecommunication networks, and to satellites in orbit.

Interestingly enough, solar physicist Keith Strong noted [in a post on X](#) that there was also a weak geomagnetic storm early Monday morning but it's "too soon" to determine if there was any correlation with the solar flare.



FJ Editor Note: Excerpt below is from a letter by Martin Jue, head of MFJ. MFJ has taken over a large segment of the amateur radio equipment and supply market; MFJ, Ameriton, Hygain, Cushcraft, Mirage and Vecronics. There are no takers to buy those companies and continue production. I talked to an Ameritron tech who said no one knows what will become of them. At Jue's age 80, I understand the need to retire. But one normally tries to pass the business on at least in support of the 40+ years of customers. Like an old soldier it just fades away. Thanks, but no thanks.

As many of you have heard by now, MFJ is ceasing its on-site production in Starkville, Mississippi on May 17, 2024. This is also the same for our sister companies' Ameritron, Hygain, Cushcraft, Mirage and Vectronics. We are going to continue to sell MFJ products past May 17, 2024. We have a lot of stock on hand. We will continue to offer repair service work for out-of-warranty and in-warranty units for the foreseeable future.

Finally, a special thanks to all of our customers and our dealers who have made MFJ a worldwide name and a profitable business for so many years. You all are so much appreciated. Sincerely Yours, 73s

Martin F. Jue, K5FLU"

Another High Altitude Balloon

1st Lt. Michael W. Kappas

Greetings.

On April 27, 2024 we safely & successfully launched a high-altitude balloon system from Georgetown Aero Modelers Association in Georgetown, TX.

The balloon system consisted of an 800g latex balloon tied by string to a 3-foot diameter parachute tied by string to a small payload box system consisting of 3 trackers:

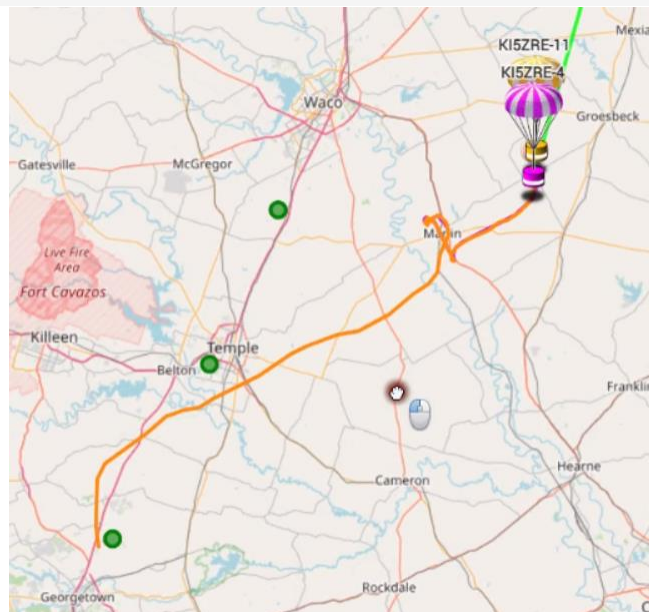
1. PicoAPRS Lite tracker (used callsign KI5ZRE-11).
2. QRP LightAPRS W2.0 WSPR tracker (used callsign KI5ZRE-4).
3. SPOT Trace GPS Satellite Tracker.



And here are the payload boxes (1 & 2) attached together with the Big Red Bee VHF Dipole antenna for the PicoAPRS Lite tracker coming out of box 1 and the eGuitar string antenna coming out of box 2.

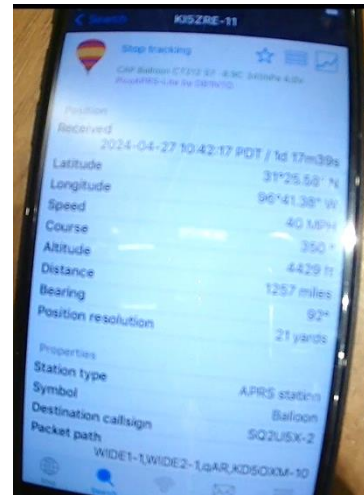
All of the trackers worked.....but position reports for the QRP LightAPRS tracker did not end of up showing up on APRS.FI until midway through the flight.

Not sure why (is the signal weaker due to smaller antenna or did the tracker not start operating until midway through the flight?). Incidentally, this QRP LightAPRS tracker started working at around the same time that the entire balloon system started a rapid ascent while circling around Martin, TX Why did the balloon system circle and climb rapidly (at least from 65,551 feet to 108,652 feet at this location? Was there a weather or atmospheric anomaly at work? Unsure.



The balloon system then continued on its journey with all 3 trackers working, ending up at LAT/LONG 31.443450,-96.695500.

Here is some information from APRS.FI:



Thank you for all who made this possible.

1st Lt. Michael W. Kappas
 Assistant External Aerospace Education Officer
 Assistant Operations Officer
 Texas Wing, U.S. Air Force Auxiliary
 voicemail: (512) 955-2633
 cell #: (512) 765-0157



SARC has had a Groups.io. Its name is saradioclub.

If you haven't signed up for group.io, you should. Groups.io is our primary email messaging method to all club members. It is FREE for all members.

Several members have asked where are the notices, schedules and codes for Zoom meetings?

1. The groups.io calendar has a schedule of Zoom meetings and access codes.
2. The calendar can be accessed directly from the club web site <https://w5sc.org/events-calendar/> NOTE: it is the same groups.io calendar.

The saradioclub Group.io is being used to publicize SARC business meetings. It can be used for other things like promotion of VEC testing and classes. Members of the saradioclub Group.io can and have asked each other technical questions or sought assistance.

The saradioclub Group.io is a closed group. To become a member, go to saradioclub.groups.io. (You may need to have a Groups.io account.) You will then need to select *Apply for membership in this group*. This generates a message. SARC members can expect approval to join the saradioclub Group.io in probably less than 24 hours.

Back in the day.

In the early days of radio, many people built their sets from schematics and a box full of parts. Often, obtaining the required components was not such an easy task, either because of a lack of means of knowing what was available from suppliers or due to lack of availability of needed parts that were advertised as being ready for purchase.

A lot of local electronics repair shops sold components, as did many hardware stores. Still, fabrication of one's own inductors, antennas, tuning capacitors and/or coils, chassis for mounting all the components, etc., was required. Accordingly, science and electronics magazines often ran a monthly feature presenting hints, kinks, tricks, and shortcuts submitted by readers.

The December 1937 issue of *Popular Mechanics* magazine published this collection of "hints" which included a homemade filter for blocking interference from appliances with electrically noisy motors (arcing from armature brushes) and a means of isolating a possibly hot chassis from the power source. Poor design and the lack of polarization on AC plugs meant there was a 50-50 chance the metal chassis would be "hot." The plan for a wind-powered generator could easily be something seen in a contemporary magazine. Back in the day, many rural locations had no commercial electric service and relied on wind and water turbines to provide power to household and farm implements.

Homemade noise filter for power line eliminates interference caused by refrigerator or other apparatus operated on same line as receiver.

Insulating bushing easily made from paper strip and Bakelite blocks. Dip in paraffin before assembling on metal chassis.

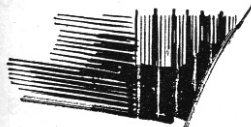
Below, multiple crystal holder for transmitter; four separate crystals selected by built-in switch. Right, spring suspension quiets battery charger; optional method, put charger on piece of asbestos placed on felt pad.

Sketch below shows suggestions for installing a "supercharger" or wind-driven battery charger to obtain unobstructed sweep of wind.

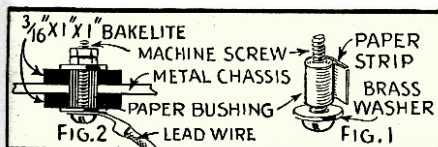
Below, simple method of taping the end of a wire to prevent shorts. Left, acoustical padding arrangement improves low-frequency response of older console cabinets.

HINTS FOR RADIO EXPERIMENTERS

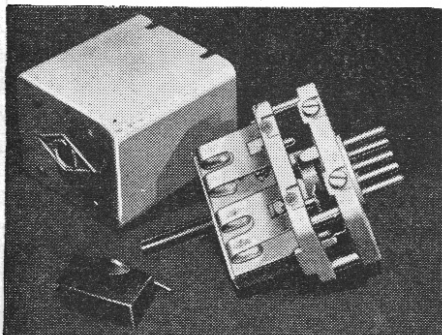
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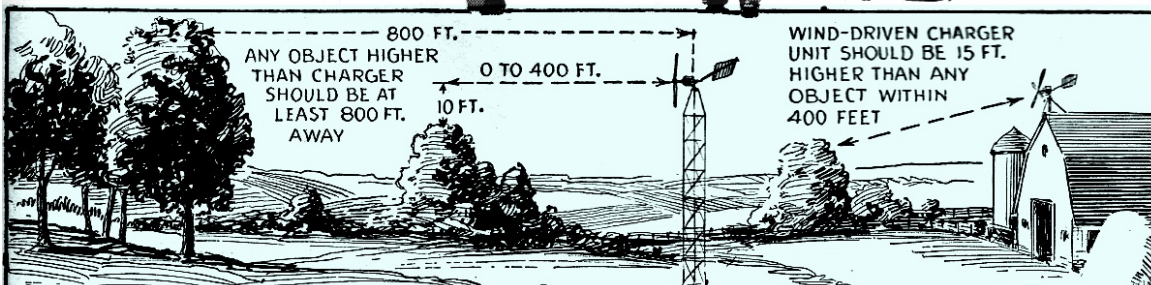
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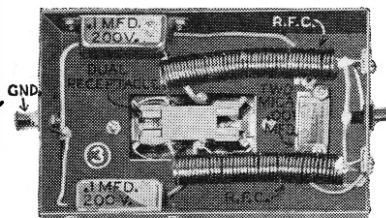
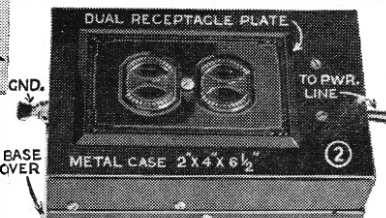
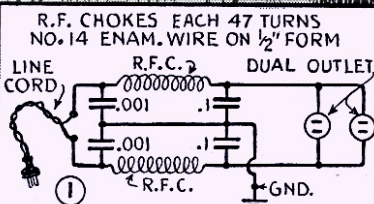
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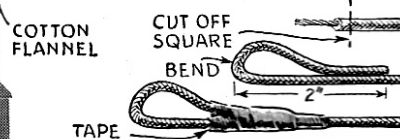
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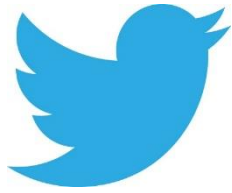
800 FT.
ANY OBJECT HIGHER THAN CHARGER SHOULD BE AT LEAST 800 FT. AWAY
0 TO 400 FT.
10 FT.



Below, simple method of taping the end of a wire to prevent shorts. Left, acoustical padding arrangement improves low-frequency response of older console cabinets



WIND-DRIVEN CHARGER UNIT SHOULD BE 15 FT. HIGHER THAN ANY OBJECT WITHIN 400 FEET



Reminder: there are two active X (Twitter) accounts for the San Antonio Radio Club. They are @SARadioClub and @ARadioFiesta.

The @SARadioClub is being used to publicize SARC meetings. It can be used for other things like promotion of VEC testing and classes.

When work again commences the @ARadioFiesta will be used.

SARC members are encouraged to follow both Twitter accounts.

SARC Facebook



There is a San Antonio Radio Club – SARC (@saradioclub) Facebook Page.

The newsletter editor is making posts about SARC meetings and other activities. Any Officer, Committee Chairperson, or member who believes that they have information that should be posted to this page should contact the newsletter editor using the contact information for the newsletter editor on page 2 of this newsletter.

SARC members are encouraged to follow this Facebook Pa

SARC SLACK



There is a San Antonio Radio Club Slack team – w5sc.slack.com.

Slack teams are meant to foster communication between team members. Paul Guido, N5IUT, has established the w5sc.slack.com team for SARC. He has also established some channels. Think of the channels as topical areas.

To join send an email to Paul Guido, N5IUT, at radioteacher@gmail.com. In actuality, any team member already a part of the w5sc.slack.com can invite you, but Paul is known to be on it.

JOTA

Jamboree-on-the-Air, or JOTA, is the largest Scouting event in the world. It is held annually on the third full weekend in October.

JOTA uses amateur radio to link Scouts and hams around the world, around the nation, and in your own community. JOTA 2023 was held at McGimsey Scout Park Cub Pavilion 10810 Wedgewood Dr, Castle Hills, TX 78213.

. Anyone wanting to operate a station next year need to do the BSA Youth protection Training (YPT) and complete BSA Health forms.

<https://www.scouting.org/training/youth-protection/>

Amateur Radio License Classes

For more information, contact:
David Finell, N7LRY
Instructor

SARC has a website:

w5sc.org

Webmaster: Bill Craft KD2HIQ
Billc851@gmail.com
210-570-0335

SARC Meeting Dates for 2024

January 11, 2024
February 8, 2024
March 14, 2024
April 11, 2024
May 8, 2024
June 13, 2024
July 11, 2024
August 8, 2024
September 12, 2024
October 10, 2024
November 14, 2024
December – No meeting

Meetings are normally held at Blanco BBQ, 13259 Blanco Rd, San Antonio, TX 78216 at 7:00 p. m. Room is available at 6:00 p. m. for supper

Radio Fiesta 2024

Radio Fiesta 2024 will be at Schertz Civic Center on July 19/20. Hours are 1-8PM Friday, 8AM to 2 PM Saturday with 0700 setup for vendors and tailgaters. Tickets are \$13 for 2 days pre-event, \$15 at the door. Children, scouts, Military and first responders in uniform free. Students with ID, \$10. Tables are \$25. The 2-day event features seminars and license testing on Saturday., See details at: <https://w5sc.org/radio-fiesta-2024-information>

Field Day 2024

Field Day exercise, June 27 – 28 at the City of Shavano Park city hall for the twenty first year. *Where SARC proves they are an eating group with a radio problem.* Start thinking about Field Day 2024!.

License Testing Dates for 2024

SARC does all of its licensing testing as a part of ARRL Volunteer Examiner Coordinator (VEC) organization so all of the Volunteer Examiners in SARC are duly authorized Volunteer Examiners of ARRL's VEC.

Register at HamTest@w5sc.org

Other info at W5SC.org click "Getting Started" then "Testing."

Emergency Communications

If you are interested in emergency communications, contact:

Ned Lee, KG5US
RACES Bexar County
210-334-3481/210-391-8258

Daniel Rice, NB5K
ARES Bexar County EC 210-347-8623